20

5

- a draining aperture in the cavity for returning excess lubricant to the source of lubricant.
- 2. The spray head of claim 1, further comprising a gasket between the cover plate and the base.
- 3. The spray head of claim 1, further comprising a lubrication chamber surrounding the spray head.
- **4.** The spray head of claim **1**, further comprising interchangeable cover plates, each having a different opening.
 - 5. A system for lubricating components, comprising:
- a reservoir containing lubricant;
- a lubrication chamber including an enclosed spray head, the spray head further comprising:
 - a base
 - a cover plate attached to the base and having an opening adapted to receive therethrough a component to be lubricated, an area between the base and cover plate defining a substantially enclosed cavity when the component to be lubricated is present,
 - a groove in the base for receiving a lubricant,
 - an aperture for emitting a lubricant mist onto a component to be lubricated while the component resides in the cavity, the aperture in fluid communication with the lubricant groove and a source of lubricant and adapted to fill at least a portion of the groove with the lubricant.
 - an air nozzle in fluid communication with the aperture, and
 - a draining aperture in the cavity for returning excess lubricant to the lubricant reservoir,
 - a supply line for transporting lubricant from the reservoir to the aperture of the spray head;
 - a supply line for transporting pressurized air to the air nozzle of the spray head;
 - a drainage line for returning excess lubricant from the spray head to the reservoir;
 - a pump that respectively forces lubricant and air through corresponding supply lines to the aperture and air nozzle of the spray head, the pump in fluid communication with the lubricant reservoir and a supply of pressurized air and selectively operable to supply a burst of pressurized air to the air nozzle to atomize and project lubricant from the groove and onto a component to be lubricated; and
 - an actuator in electrical communication with the pump.
- **6**. The system of claim **5**, further comprising a gasket between the cover plate and the base of the spray head.
- 7. The system of claim 5, wherein the pump is a pneumatic pump in fluid communication with a source of pressurized air, 50 the pump including a lubricant pump portion and an air pump portion.
- **8**. The system of claim **7**, wherein the pump operates in sequence to supply lubricant to the spray head prior to supplying pressurized air to the spray head.
- 9. The system of claim 7, further comprising a pulse generator associated with the lubricant pump portion of the pump, the pulse generator limiting the amount of lubricant supplied to the spray head when the lubricant pump portion of the pump is activated.
- 10. The system of claim 5, further comprising a check valve in the lubricant supply line for preventing a backflow of lubricant.
- 11. The system of claim 5, wherein the aperture includes a lubricant orifice for emitting lubricant.
- 12. The system of claim 5, wherein the spray head includes multiple apertures, each having an air nozzle.

6

- **13**. The system of claim **5**, further comprising: multiple apertures;
- a lubricant groove in communication with the apertures and provided to receive and contain an amount of lubricant supplied through the aperture;
- a lubricant orifice in each aperture through which lubricant is supplied to the lubricant groove; and
- an air nozzle exiting into each aperture, the air nozzles in fluid communication with the air pump portion of the pump for supplying a burst of pressurized air to atomize and eject lubricant from the lubricant groove and onto a component to be lubricated.
- **14**. The system of claim **13**, wherein the air nozzles are directed toward a center of the cavity.
- 15. The system of claim 5, wherein at least the lubricant reservoir, lubrication chamber and pump are attached to a framework.
 - **16**. A system for lubricating components, comprising: a reservoir containing lubricant;
 - a pump assembly in fluid communication with the lubricant reservoir and a source of pressurized air, the pump assembly including a lubricant pump portion and an air pump portion;
 - a lubrication chamber including an enclosed spray head,
 the spray head further comprising:
 a base,
 - a cover plate attached to the base and having an opening adapted to receive therethrough a component to be lubricated, an area between the base and cover plate defining a substantially enclosed cavity when the component to be lubricated is present,
 - a lubricant groove residing within the cavity, the lubricant groove for receiving and containing an amount of lubricant,
 - a plurality of apertures opening into the lubricant
 - a lubricant orifice in each aperture for supplying lubricant to the lubricant groove, the lubricant orifices in fluid communication with the lubricant pump portion of the pump assembly,
 - an air nozzle exiting into each aperture, the air nozzles in fluid communication with the air pump portion of the pump assembly, and
 - a draining aperture in the cavity for returning excess lubricant to the lubricant reservoir,
 - supply lines for transporting lubricant from the lubricant pump portion of the pump assembly to the lubricant orifices of the spray head;
 - supply lines for transporting pressurized air from the air pump portion of the pump assembly to the air nozzles of the spray head;
 - a drainage line for returning excess lubricant from the drainage aperture of the spray head to the lubricant reservoir; and
 - an actuator in electrical communication with the pump;
 - wherein, upon activation of the actuator, the lubricant pump portion of the pump assembly causes lubricant to be transferred from the lubricant reservoir to the lubricant groove in the spray head; and
 - wherein, subsequent thereto, the air pump portion of the pump assembly sends a burst of pressurized air to the air nozzles, thereby atomizing and ejecting at least a portion of the lubricant in the lubricant groove onto a component to be lubricated.
- 17. The system of claim 16, further comprising a pulse generator associated with the lubricant pump portion of the pump assembly, the pulse generator limiting the amount of